**IN THE CLAIMS**

The current status of the claims is reflected in the below listing of claims.

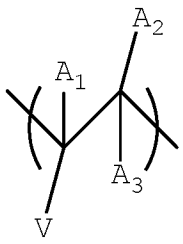
1. (Currently Amended) A polyelectrolyte film comprising an interpenetrating network of a net positively charged polyelectrolyte polymer comprising repeat units with at least two fluorine atoms **,** ~~and~~ a net negatively charged polyelectrolyte polymer comprising repeat units with at least two fluorine atoms **, and further comprising a perfluorinated counterion within the bulk of the interpenetrating network of the net positively charged polyelectrolyte polymer and the net negatively charged polyelectrolyte polymer, the fluorinated counterion comprising at least two fluorine atoms** .

2. (Original) The polyelectrolyte film of claim 1 wherein the net positively charged polymer and the net negatively charged polymer are independently selected from the group consisting of polyolefins, polyamines, polyamides, polyethers, polyesters, polyimides, polysulfones, polyaryls, polyphenols, polyaramides, and copolymers thereof.

3. (Original) The polyelectrolyte film of claim 1 wherein the net positively charged polymer and the net negatively charged polymer are polyolefins having vinyl groups.

4. (Original) The polyelectrolyte film of claim 3 wherein the vinyl group is an allyl group.

5. (Previously Presented) The polyelectrolyte film of claim 2 wherein the repeat unit has the structure:



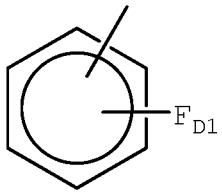

wherein $A_1$, $A_2$, and $A_3$ are each independently $-(CH_2)_mH$ or $-(CH_xF_{2-x})_nF$; m and n are independently 0 to 12; x is 0, 1, or 2; and each V is independently selected from the group consisting of:

fluorinated hydrocarbons having the formula: $-(CH_2)_p(CF_2)_qF$; $-(CH_2)_p(CF_2)_qCOOH$; $-(CH_2)_p(CF_2)_qOPO_3^-$; $-(CH_2)_p(CF_2)_qSO_3^-$; $-(CH_2)_p(CF_2)_qOSO_3^-$; $-O(CH_2)_p-(CF_2)_q-F$; or $-O(CH_2)_p(CF_2)_q-SO_3^-$;

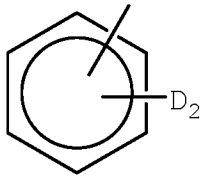
fluorinated amides having the formulae $-CONB_1$ wherein $B_1$ is $-(CH_2)_p(CF_2)_qF$; $-(CH_2)_p(CF_2)_qCOOH$; $-(CH_2)_p(CF_2)_qOPO_3^-$; $-(CH_2)_p(CF_2)_qSO_3^-$; or $-(CH_2)_p(CF_2)_qOSO_3^-$;

fluorinated esters having the formulae $-COOC_1$ wherein $C_1$ is $-(CH_2)_p(CF_2)_qF$; $-(CH_2)_p(CF_2)_qCOOH$; $-(CH_2)_p(CF_2)_qOPO_3^-$; $-(CH_2)_p(CF_2)_qSO_3^-$; or $-(CH_2)_p(CF_2)_qOSO_3^-$;

fluorinated phenyl groups having the formulae:

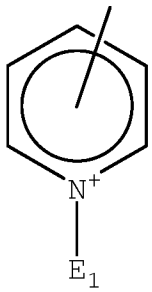



wherein D1 is 2 to 5; or



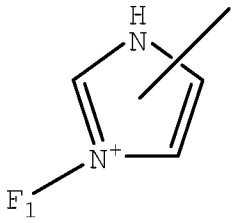

wherein $D_2$ is $-(CH_2)_p(CF_2)_qF$ or $-O(CH_2)_p(CF_2)_qF$;

fluorinated pyridiniums having the formulae:



wherein $E_1$ is $-(CH_2)_p(CF_2)_qF$;

fluorinated imidazoliums having the formulae:



wherein $F_1$ is $-(CH_2)_p(CF_2)_qF$;

fluorinated quaternary nitrogens having the formulae $-N^+G_1G_2G_3$ where $G_1$, $G_2$, and $G_3$ are each independently $-(CH_2)_p(CF_2)_qF$ or $-arylF_z$ wherein z is 2 to 8;

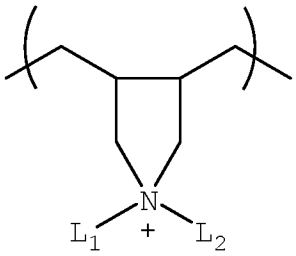
fluorinated sulfoniums having the formulae $-S^+H_1H_2$ where $H_1$ and $H_2$ are independently $-(CH_2)_p(CF_2)_qF$; Or $-arylF_z$ where z is 2 to 8; and

fluorinated phosphoniums having the formulae $-P^+J_1J_2J_3$ where $J_1$, $J_2$, and $J_3$ are independently: $-(CH_2)_p(CF_2)_qF$; or $-arylF_z$ where z is 2 to 8;

p is 0 to 6 and

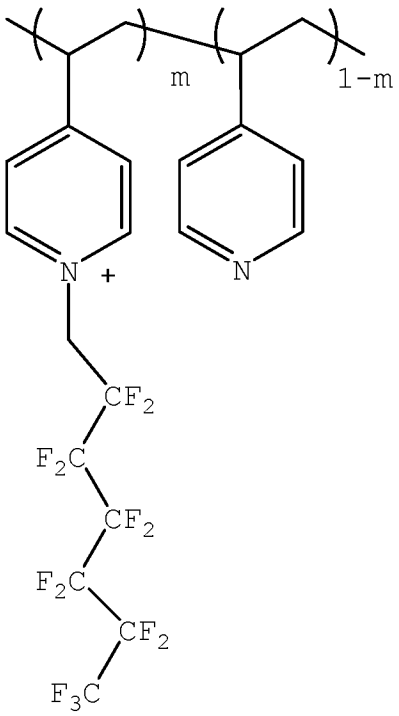
q is 1 to 21.

6. (Original) The polyelectrolyte film of claim 2 wherein the polymer repeat unit comprises an allyl group having the structure:



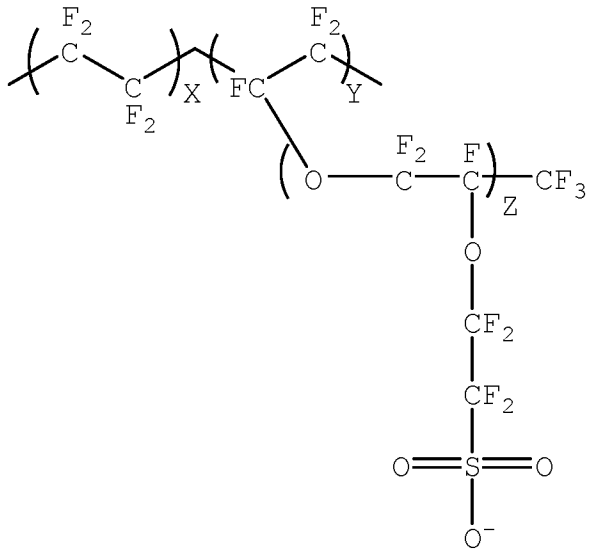
wherein $L_1$ and $L_2$ are $-(CH_2)_p(CF_2)_qF$, p and q are independently selected for $L_1$ and $L_2$, and p is 0 to 6 and q is 1 to 21.

7. (Original) The polyelectrolyte film of claim 1 wherein the net positively charged polymer has the structure:



wherein m is a mole fraction from about 0.1 to about 1.0.

8. (Original) The polyelectrolyte film of claim 1 wherein the net negatively charged polymer has the structure:



wherein X is from about 6 to about 10, Y is about 1, and Z is from about 1 to about 3.

9. (Original) The polyelectrolyte film of claim 1 further comprising particles having a size in the range of about 1 nanometer to about 10 micrometers.

10. (Original) The polyelectrolyte film of claim 9 wherein the particles are selected from the group consisting of silicon dioxide, aluminum oxide, titanium dioxide, iron oxide, zirconium oxide, vanadium oxide, clay minerals, carbon fibers, carbon nanotubes, and charged fluorinated particles.

11. (Original) The polyelectrolyte film of claim 10 wherein the particle is the clay mineral, and the clay mineral comprises attapulgite clay.

12. (Currently Amended) A film comprising a charged polyelectrolyte polymer comprising repeat units with at least two fluorine atoms and a ~~fluorinated~~ **perfluorinated** charged particle comprising repeat units with at least two fluorine

atoms, wherein the charge of the polyelectrolyte polymer is opposite that of the charge of the ~~fluorinated~~ **perfluorinated** charged particle.

13. (Currently Amended) The film of claim 12 wherein the ~~fluorinated~~ **perfluorinated** charged particle comprises polytetrafluoroethylene.

14. - 27. (Canceled)

28. (Original) A thin film of claim 1 used for the purpose of reducing friction at a surface.

29. (Previously Presented) The polyelectrolyte film of claim 28 wherein said surface is selected from the group consisting of metals, plastic, semiconductor, and metal oxide.

30. (Previously Presented) The polyelectrolyte film of claim 1 in contact with and on a surface of a rotating disc magnetic storage medium ("fixed disc").

31. (Previously Presented) The polyelectrolyte film of claim 1 in contact with and on a surface of a rotating disc magnetic storage medium ("fixed disc") wherein the polyelectrolyte film further comprises a surface layer comprising a fluorinated small molecule or a fluorinated oligomer.

32. (Previously Presented) The polyelectrolyte film of claim 1 formed between two contacting, moving metal surfaces.

33. (Previously Presented) The polyelectrolyte film of claim 1 formed between two contacting, moving metal surfaces, said polyelectrolyte film formed by the addition of particles of complexed fluorinated polyelectrolytes.

34. - 35. (Canceled)

36. (Previously Presented) The polyelectrolyte film of claim 1 forming an intermediate layer between an electrically conductive contact and a thin film of medium, said medium emitting light on passage of an electrical current.

37. (Previously Presented) The polyelectrolyte film of claim 1 forming an intermediate layer between an electrically conductive contact and a light emitting medium, said contact injecting electrons into said medium.

38. (Previously Presented) The polyelectrolyte film of claim 1 forming an intermediate layer between an electrically conductive contact and a light emitting medium, said medium comprising a conjugated polymer.

39. (New) The polyelectrolyte film of claim 1 having a thickness of less than 1 micrometer.

40. (New) The polyelectrolyte film of claim 1 wherein the perfluorinated counterion is selected from the group consisting of perfluoroalkanesulfonic acid and perfluoroalkanecarboxylic acid.

41. (New) The polyelectrolyte film of claim 1 wherein the polyelectrolyte film is in contact with a film of poly perfluorinated sulfonated ionomer, wherein the poly perfluorinated sulfonated ionomer film has a thickness between 10 micrometers and 1000 micrometers.